

Application No.: 10/734,948

Docket No.: JCLA12519

AMENDMENTS**In The Specification:**

Please amend the following paragraph as indicated.

[0019] More specifically, if there is the temperature glide, the temperature increases from the inlet of the evaporator to its outlet during the evaporation. Therefore, for a machine requiring different evaporation temperatures for the refrigeration and the cold storage, such as a refrigerator, a temperature range from the temperature at the beginning of the evaporation to an intermediate temperature, which intermediate temperature is between the temperature at the beginning of the evaporation and ending of the evaporation, is used for the refrigeration area, and a temperature range from the intermediate temperature to the temperature at the ending of the evaporation is used for the ~~refrigeration~~ cold storage area. As a result, the temperature difference during the phase transition can be effectively utilized, and the cycle property can be improved.

[0029] Fig. 3 shows a conceptual diagram of an exemplary refrigerating cycle. As shown in Fig. 3, the refrigerating cycle comprises a compressor 100, a gas cooler 120, an expansion mechanism 140, an evaporator 160, a four-way valve 180 and a drying device 200, all of which are sequentially connected by a refrigerant path (refrigerant pipes) 10 that are depicted by solid lines. Further in Fig. 3, solid and dash arrow signs depict flow directions of the refrigerant, of which the solid arrow shows a case of performing an ordinary cooling process and the dash arrow shows a case of performing a defrosting or heating process. In Fig. ~~[[2]]~~3, the drying

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device 200 is exemplarily disposed between the expansion mechanism 140 and the gas cooler 120. However, the position of the drying device 200 is not limited thereto, the drying device 200 can be also arranged at a location at the low pressure side depending on the conditions.

[0030] In an example of cooling an interior space, a high-temperature and high-pressure refrigerant gas, compressed by the compressor 100, passes through the four-way valve 180 and then is cooled by the gas cooler ~~[[140]]~~120, so as to become a low temperature and high pressure refrigerant liquid. The refrigerant liquid is then depressurized by the expansion mechanism 140 (for example, a capillary tube, a temperature-type expansion valve, etc.) and becomes a low-temperature and low-pressure liquid that only contains little gas. The low-temperature and low-pressure liquid then reaches the evaporator 160, absorbs heat from the air in the interior space, and then evaporates. The evaporated liquid passes through the four-way valve 180 again and then reaches the compressor 100. As a result, the interior space is cooled.